How much residential development happens in mixed use zones in Victoria?

Main research questions

1. How much residential development happens in mixed use areas?
2. How has this shifted after the 2013 Commercial Zoning reforms?

Datasets used

Development datasets

- Housing Development Data (2005 to 2016) — shows dwellings completed by year
- Urban Development Program (2016 to 2025) — shows major residential projects (10 or more dwellings) completed by year
- Planning Permit Activity Reporting (2008 to 2021) — all planning permits lodged in Victoria
  - Use the permit classifiers from the permit conversion project to get tags to separate out full residential and mixed use.
  - The residential tags are highly accurate but the mixed-use classifier is less so.

Zoning datasets

- Historical planning shapefiles (2000 to 2016)
- Vicmap Planning - Planning Scheme Zone History Polygon (2017 to current)
- Vicmap Planning - Planning Scheme Overlay History Polygon (2017 to current)

Historical context

On 15 July 2013, land previously zoned Business 1, Business 2 and Business 5 was translated across to the Commercial 1 Zone and land previously zoned Business 3 and Business 4 was translated across to the Commercial 2 Zone.

The Business 1, 2, 3, 4 and 5 zones were deleted from the VPP and all planning schemes.

Commercial 1 Zone (the new B1/B2/B5).

This zone broadened the range of permitted activities and stripped out floor area restrictions. It removed permit requirements for all Accommodation (other than a Corrective institution), all retail uses (except for an Adult sex bookshop), and Exhibition centre — including allowing a Supermarket and Shop without a permit.

It also removed the conditions for Education centre and Office, and removed all floor space caps for Shop and Office in Melbourne metropolitan planning schemes, though rural planning schemes had existing Business 1 and 2 schedules migrated to a new Commercial 1 Zone schedule.

It also removed the requirement to obtain permits for residential and office uses. Previously, residential development was allowed as-of-right (that is, without a permit) in the Business 1 and 5 zones — with some restrictions on ground frontage and shared office use — and was a restricted use (that is, allowed with a permit) in the Business 2 Zone

Commercial 2 Zone (the new B3/B4)

This zone was geared toward office, commercial business, restricted retail, trade supplies and some limited retail. Floor area restrictions for office and some retail uses were removed in many instances to create opportunities for office and retail growth. Specifically, the zone:

- Does not require a permit to use land for a Cinema, Cinema-based entertainment facility, Food and drink premises, Office, Restricted retail premises and Trade supplies
- Removes the maximum floor area restriction for an Office
- Prohibits Accommodation (other than Caretaker's house, Motel and Residential hotel)
- Allows a small-scale Supermarket (under 1,800 sqm) and associated Shops (under 500 sqm) without a permit in metropolitan Melbourne, but requires a permit for these uses in rural municipalities

- Requires that larger supermarkets and stand-alone shops obtain a permit in metropolitan Melbourne, while larger supermarkets are prohibited in rural municipalities
- Requires that supermarkets and associated shops adjoin or have access to a main road

Mixed Use Zone

The Mixed Use Zone was retained but reformed (rather than deleted), with changes effective from 15 July 2013. The reformed zone:

- Allows local objectives, application requirements and decision guidelines to be specified
- Allows a local maximum building height to be specified that cannot be exceeded
- Allows key residential siting and design requirements to be varied for different neighbourhoods
- Removes or reduces restrictions on non-residential land uses such as a place of worship, medical centre and convenience shop
- Includes additional amenity requirements for buildings on lots abutting land in a Neighbourhood Residential Zone, General Residential Zone, Residential Growth Zone or Township Zone
- Allows multiple schedules to the zone
- Removes the floorspace area restrictions from the schedule to the zone for office, shop and trade supplies
- Allows a bed and breakfast use to accommodate 10 persons as-of-right

Analysis approach

"Mixed use zones"	Business 1 Zone, Business 2 Zone, Business 5 Zone, Commercial 1 Zone, Mixed Use Zone, Activity Centre Zone
Excluded mixed use zones	Capital City Zone, Dockland Zone

1. Use HDD and UDP data to track completions across mixed use zones
    a. Bucket by those in activity centres, within 400m, within 800m, and outside of 800m.
    b. Include and exclude Melbourne LGA and the capital city zones.
2. Use PPARs data to track lodged permits across mixed use zones
    a. Bucket by those in activity centres, within 400m, within 800m, and outside of 800m.
    b. Include and exclude Melbourne LGA and the capital city zones.

Housing development in metropolitan mixed use and commercial areas (2005–2023)

This research is structured into four distinct components:

- **Part A** — Analysis of *all* residential completions across metropolitan Melbourne (2005 to 2016) using Housing Development Data.
- **Part B** — Focus on *major* residential projects (defined as 10 or more units) through 2023, integrating HDD with Urban Development Program datasets.
- **Part C** — Investigation of *planning permit activity* (2010 to 2020) to distinguish between standalone residential and mixed use projects on commercial land.
- **Part D** — A *causal evaluation* testing whether the July 2013 shift to as-of-right housing in the former Business 2 Zone increased development activity.

Summary of key findings

- **Mixed use zones provide a significant and increasing portion of housing supply:** while representing 14% of total dwellings, these zones now account for roughly 38% of major residential projects (+10 dwelling projects).
- **Development is highly concentrated in "activity centres":** approximately 92% of housing in these zones is located within 800 metres of an activity centre, showing a trend toward the centre *core* over time.
- **Mixed use land predominantly supports mixed use projects:** ~69% of mixed use zoning permitted dwellings come bundled with non-residential uses.
- **The one causal test is suggestive but inconclusive:** by-right housing in B2Z is associated with +20% dwellings / +7% permits vs B1Z, not statistically significant given the small treated group.

Part A — Complete residential development (2005–2016)

1. Headline figures

Mixed use zones account for 63,404 constructed dwellings. Around 14.4% of all metro residential development, 2005–2016.

Adding the two CBD zones reported separately:

Capital City Zone +20,010 (4.5%) and Docklands +6,431 (1.5%).

The mixed use zones and the CBD zones together amount to 89,845 dwellings = 20.4% of metro housing built.

Zone grouping	Dwellings built	Share of metro total
Residential (NRZ/GRZ/RGZ)	289,653	65.7%
Mixed use zones	**63,404**	**14.4%**
Other (UGZ, SUZ, etc.)	61,116	13.9%
Capital City Zone (CBD)	20,010	4.5%
Docklands Zone	6,431	1.5%

2. Distribution within the commercial group

Zone type	Dwellings	Share of group
Mixed Use (MUZ)	30,456	48.0%

Commercial 1	13,062	20.6%
Business 2	7,574	11.9%
Business 1	7,088	11.2%
Business 5	3,234	5.1%
Activity Centre Zone	1,990	3.1%

The Mixed Use Zone (MUZ) alone delivers nearly half of all commercial-zone housing.[1] Mixed-use zones are used more within Activity Centres and near the CBD hence why they take up a larger share — it's where zoned capacity is highest.

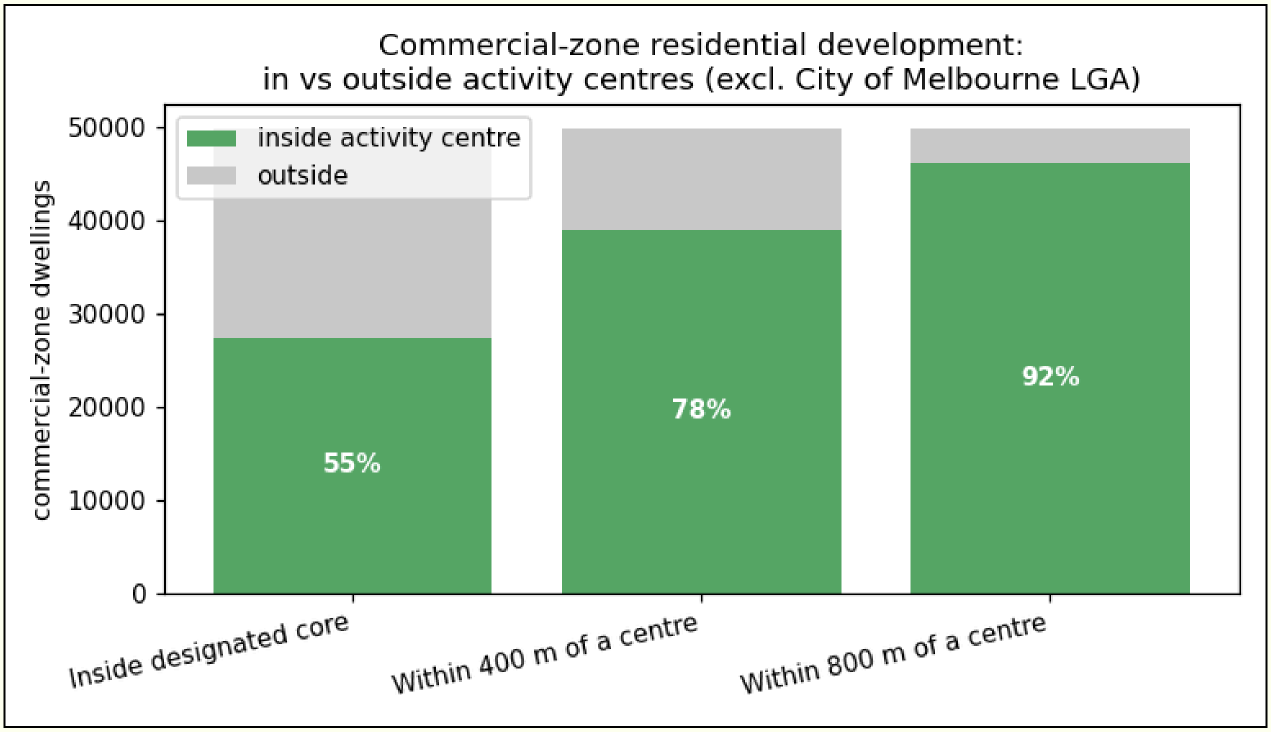
The Business zones (B1Z/B2Z/B5Z) were abolished by Amendment VC100 (Jul 2013) and folded into Commercial 1, so Business-zone projects from after 2013 are reported here as Commercial 1 (the "Business" rows are pre-2014 only). That is why Commercial 1 is now the second-largest category.

3. Activity centre concentration

Housing in mixed use zones is strongly clustered around activity centres.

Definition (excl. Melbourne LGA)	In centre	Outside	In-centre share
Within designated core	27,388	22,581	**54.8%**
Within 400m catchment	39,019	10,950	**78.1%**
Within 800m catchment	46,176	3,793	**92.4%**

[1] This is the Mixed Use Zone, not the collection of all the mixed use zones.



Approximately 92% of housing in mixed use zones is within 800 metres of a centre, compared to 59% for standard residential zones. This confirms that housing in mixed use zones is significantly more centre-oriented.

Growth has also shifted *into* the core cores over time. The **core share nearly doubled, increasing from 30% to 55%** as development moved away from outer rings. This pattern is particularly strong when **excluding the Melbourne LGA**, where the core share ranges from **49% to 67%**, indicating that suburban commercial housing is even more centre-dependent.

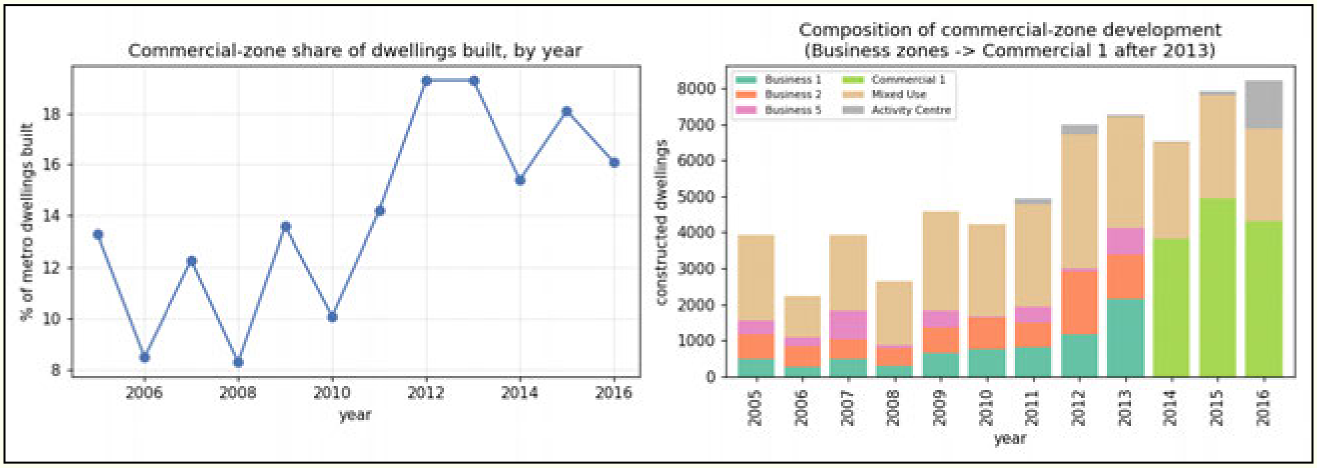
This is consistent with strategic planning shifts encouraged by Plan Melbourne (both the 2013 and 2017 editions).

NOTE: The “Activity Centres” aren’t the ACs in the Activity Centre Program. They’re areas which previous strategic planning work has identified as “activity hubs” where people travel to for work, activities, leisure, etc. There’s no clear data on when an activity centre was designated as such. Post-2000 the activity centre designations have remained relatively consistent but there’s the chance that some may have only been designated such at a date after the time series begins.

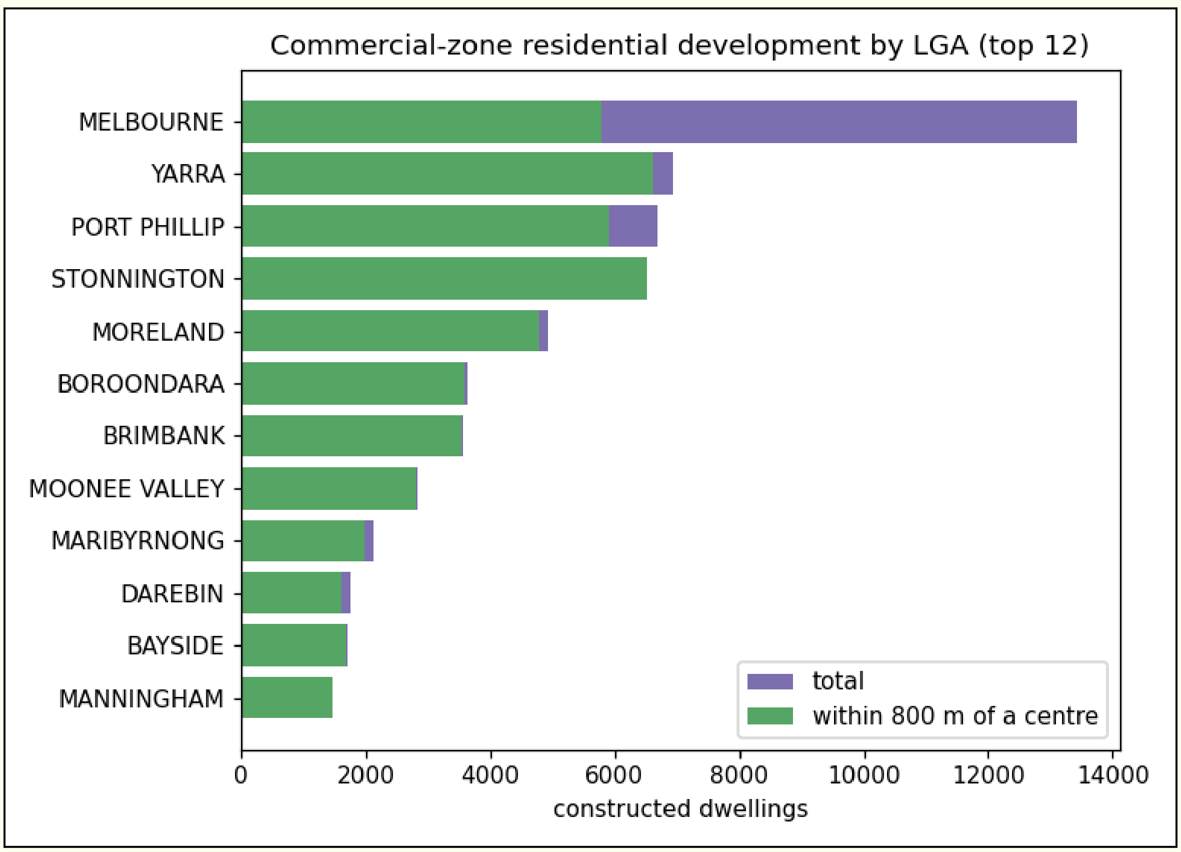
4. Temporal trends

Housing in mixed use zones roughly doubled its share across the measured period — from ~8–13% (2005–2010) to ~16–19% (2012–2016) — and rose in absolute terms from

~2,000–4,000 to ~8,000 dwellings/yr. The composition shift from Business zones to Commercial 1 (post-2013 reform) is visible but the combined commercial-zone total kept climbing.



5. Geographical distribution (LGAs)

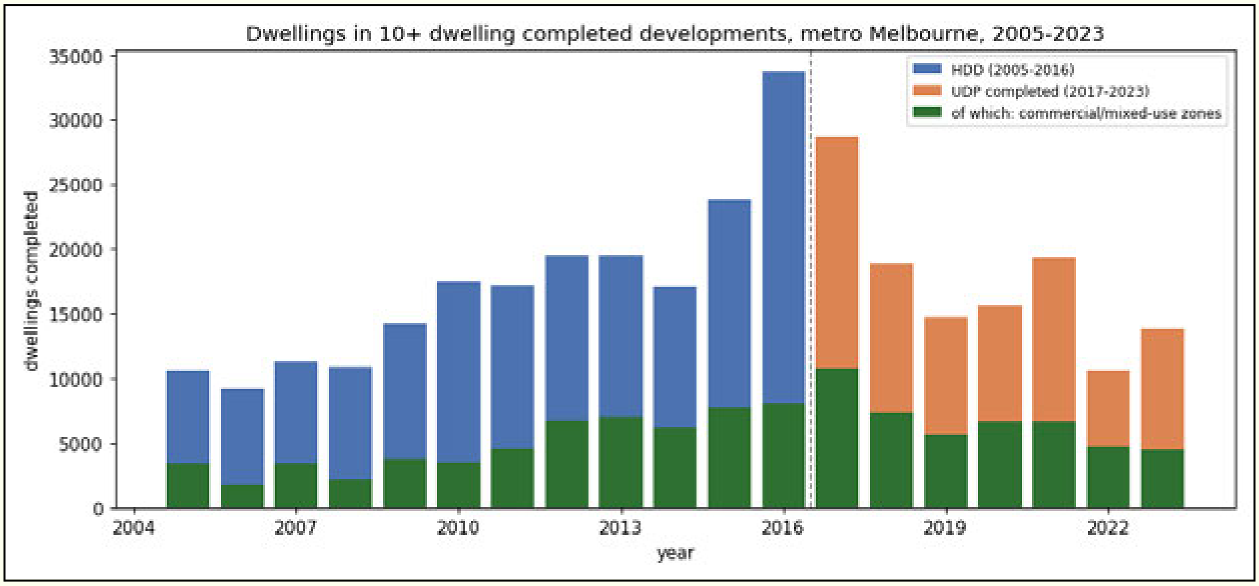


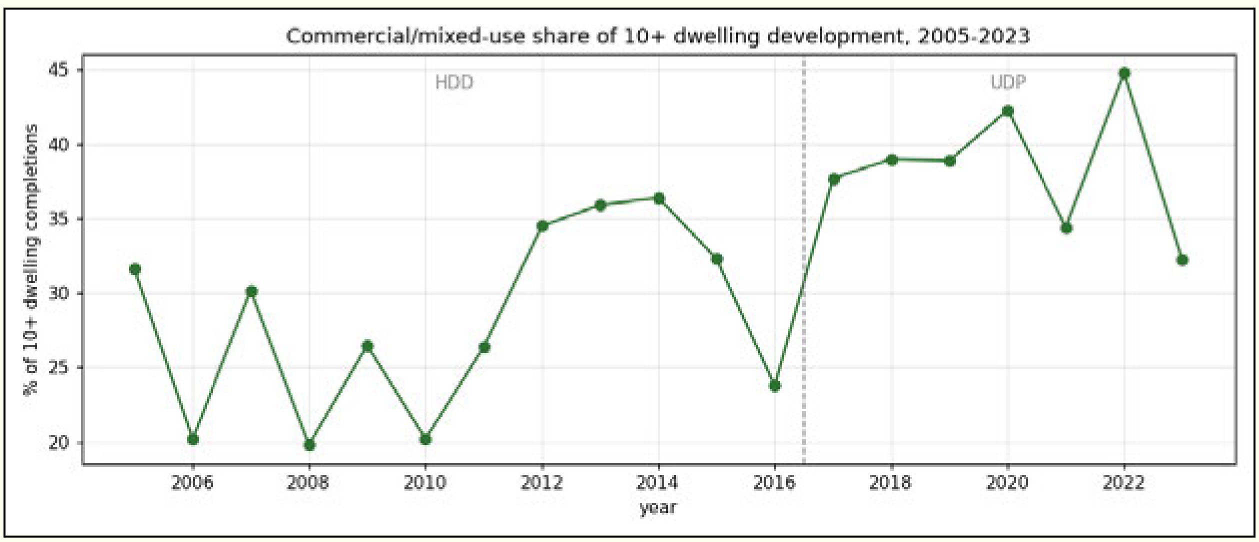
Housing in mixed use zones is concentrated in the inner city.

By share of the council's housing that lands in commercial/mixed-use zones: Port Phillip 62.5%, Yarra 61.7%, Stonnington 58.7%, Brimbank 32.7%, Melbourne 30.5%, Moreland 30.4%.

By volume, Melbourne (13,435) leads, then Yarra, Port Phillip and Stonnington (~6.5–6.9k each). In the inner councils, nearly all of this development is within 800 m of a centre (Stonnington 100%, Yarra 95%, Port Phillip 88%).

Part B — Major residential projects (10+ units) through 2023





To track larger residential development specifically and to push the series past the HDD's 2016 cut-off, we restrict to projects of 10+ dwellings and splice on the Urban Development Program (UDP) "Major Redevelopment Sites" layer (which by definition tracks 10+ dwelling projects):

- 2005–2016: HDD projects with ≥10 constructed dwellings.
- 2017–2023: UDP Major Redevelopment Sites with STATUS = Completed, 10+ dwellings, deduplicated across the 2017–2024 annual releases by PROJECTID (each release reports ~its prior 1–2 years of completions).

The two sources splice cleanly. At the 2016 overlap, HDD records 583 projects / 33,745 dwellings and UDP records 629 / 35,950 — within ~7%, so the join introduces at most a small upward step in 2017.

Combined series: 6,565 projects, 326,386 dwellings, 2005–2023.

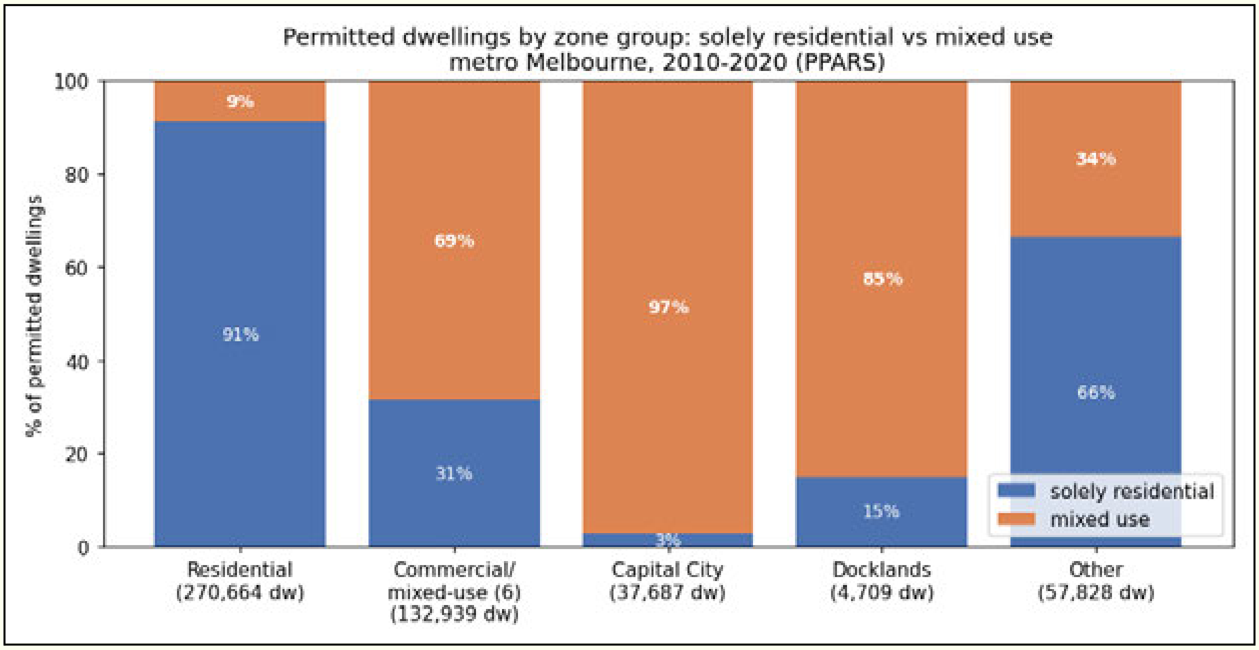
Period	Projects	Dwellings	Commercial share	In 800m
2005–2016 (HDD)	4,515	204,616	**28.5%**	82.4%
2017–2023 (UDP)	2,050	121,770	**38.1%**	83.2%

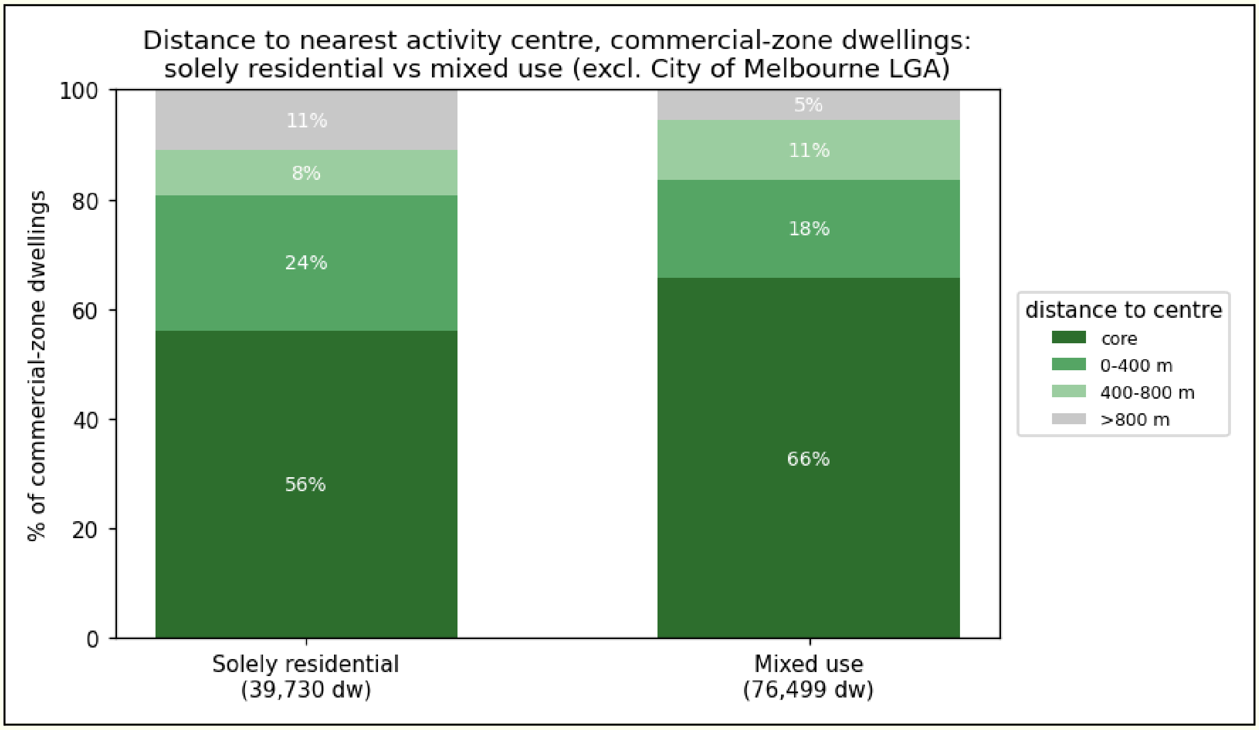
Key findings from Part B:

- **Major developments gravitate toward commercial land.** Commercial zones account for **28% to 38%** of all major projects—double their share of the total housing market.
- **The share of major development is increasing,** trending upward from roughly 20% in the 2000s to over 32% in the current era.
- **Centre-focused growth remains consistent,** with over 82% of commercial major projects located within 800m of an activity centre.
- Production volumes peaked in 2016 at 33,700 units, with current annual rates between 10,000 and 29,000 completions.

Dataset limitations: The series currently concludes in **2023**, as the 2024 UDP release covers completions through the previous year. Subsequent releases will be required to extend the analysis further.

Part C — Residential vs mixed use planning activity (2010–2020)





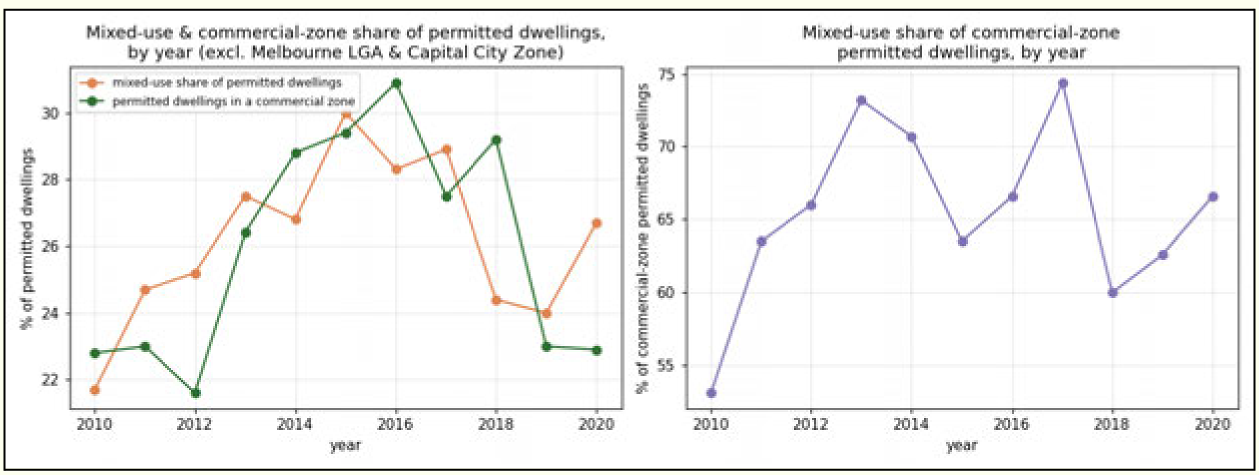
While earlier sections focus on *completed* units, Part C analyzes the **planning permit** pipeline to determine whether housing in commercial zones is **solely residential** or part of a **mixed use** development incorporating non-residential functions.

Methodology. Utilizing PPARS data, the analysis filters for **approved permits** relating to a **new dwelling**. Applications are processed via the custom classifier to identify **mixed use** projects based on specific keyword triggers (retail, office, medical, etc.). The study includes **99,437 approved permits from 2010 to 2020**. All metrics in Part C are **weighted by dwelling count** (totaling 503,827 units), as mixed use projects tend to be significantly larger than standalone ones.

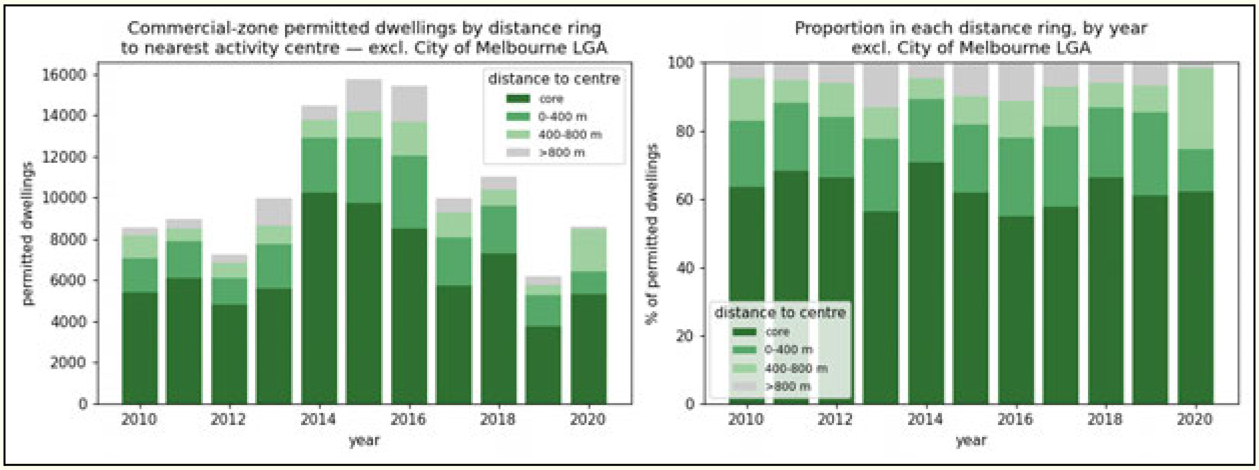
- **Note on net dwellings.** Figures reflect **net additions** (new units minus demolitions). Projects involving simple replacement or modest intensification reflect only the net increase in housing stock.

Findings (Part C):

1. **Housing in mixed use areas are majority mixed-use.** Of (net) permitted dwellings in the 6 commercial/mixed-use zones, 69% are mixed use vs just 9% in residential zones. CCZ (97%) and Docklands (85%) are almost entirely mixed-use. So housing delivered on commercial land typically comes bundled with shops/offices, not as standalone apartments.
2. **Mixed-use dwellings are overwhelmingly a mixed use zoning phenomenon.** Of all mixed-use dwellings, 52% sit in the 6 mixed use zones and 75% in the when including CCZ/Docklands, vs only 14% in residential zones. Solely-residential dwellings are the mirror image — 75% in residential zones, 13% in commercial.
3. **Mixed-use is more centre-bound than solely-residential.** Within commercial zones, 66% of mixed-use dwellings are inside the activity-centre core (94% within 800 m) vs 56% / 89% for solely-residential.



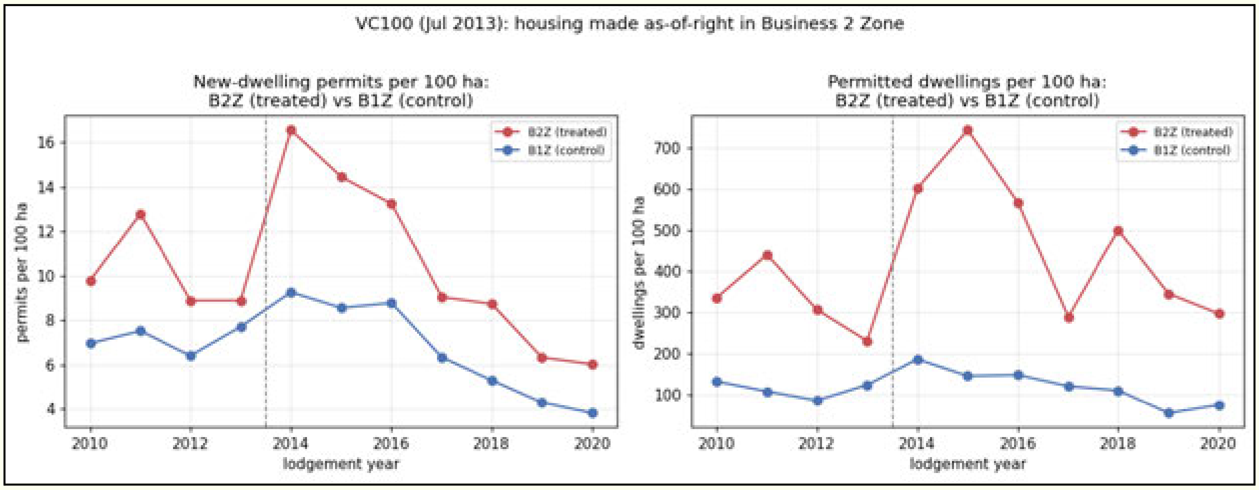
4. **Trending up then back.** Mixed-use permits rose from ~22% of (net) permitted dwellings (2010) to ~30% (2015) and held ~24–29% to 2020; the mixed using zoning's mixed-use share runs ~53–74%, and the share of dwellings landing in a commercial zone peaked at 31% (2016).
5. Highest mixed-use shares in Melbourne (88%), Port Phillip and Kingston (77%), Stonnington (76%); Moreland (17,166) and Melbourne (16,710) have the most mixed-use zoning dwellings.

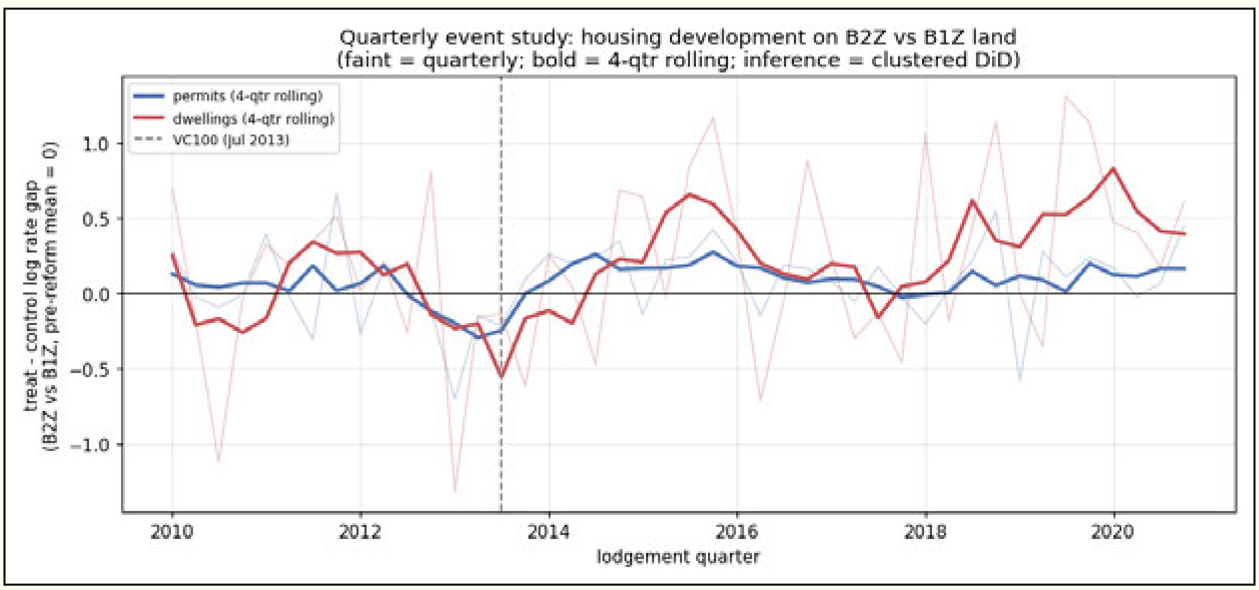


6. Mixed use zoning permitted dwellings stay tightly centre-bound across 2010–2020 — the core ring holds ~55–71% (excl. Melbourne) with no drift outward — confirming the completions pattern on the permit pipeline.

Caveats. Permits are approvals, not completions, dated by lodgement year (a leading indicator vs Parts A/B). Dwelling counts are net of demolition (PPARS NUMBER_OF_NEW_DWELLINGS primary, text estimate as fallback), so they are not directly comparable to Parts A/B's gross constructed/completed dwellings — they sit a little lower. A small share of permits have neither a field value nor a parseable count and contribute 0. The residential-vs-mixed split is text-based and the non-residential-use keyword rule is deliberately broad, so treat the shares as indicative, not precise point estimates.

Part D — Causal evaluation of by-right status (VC100, July 2013)





The reform experiment. Prior to July 2013, housing in the **Business 2 Zone (B2Z)** was discretionary. Amendment **VC100** transitioned this land to **as-of-right** status within the Commercial 1 Zone, matching the rules of the **Business 1 Zone (B1Z)**. This study uses a difference-in-differences approach:

- **Treatment group = Land zoned B2Z in 2012.**
- **Control group = Land zoned B1Z in 2012 (rules remained unchanged).**

Experimental design. The study tracks approved dwelling permits from **2010 to 2020**, using **area-normalized** rates per 100 hectares. The 2012 study area includes 664 ha of

B2Z and 2,701 ha of B1Z. Analysis employs 2×2 DiD rates and **TWFE Poisson** modeling with clustering by LGA.

Results — Growth observed but statistical significance not reached.

Outcome metric	**2×2 DiD (per 100ha)**	**Poisson DiD**	**p-value**
Dwelling permits	+0.48	**+7%**	0.53
Permitted dwellings	+105.8	**+20%**	0.54

- **Estimates suggest the reform enabled larger projects** rather than just more projects, with a visible **spike in B2Z activity in 2014**. However, these effects remain statistically indistinguishable from zero.
- **The quarterly event study shows persistent positive trends** following VC100, with permits and dwellings remaining above pre-reform levels through 2020. While visually supportive, the small and "lumpy" nature of the B2Z treatment group impacts formal inference.

Interpretation: There is suggestive evidence that by-right status increased dwelling volume by 20%, but the results are **not conclusive**. Structural factors, including the high pre-existing growth rates in B2Z, likely limited the room for a dramatic convergence jump.

Caveats. Analysis uses *net* dwellings and *approval* dates. The **quarterly** frequency is used to manage sparse monthly data. Robustness checks involving alternative controls and placebo timings are pending.